Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A device for time-managing the utilization of data detected in a data flow and constituting at least one data set, the device comprising a circuit for processing the data detected, a memory making it possible to store the data detected, the data currently being processed, the processed data intended to be utilized and the processed data undergoing utilization, the utilization of the processed data having to be triggered at a given theoretical instant wherein said device comprises a circuit (MP) for calculating a minimum duration (d) of utilization of the data, which is proportional to the amount (L) of data contained in the data set and a function of the difference between the theoretical instant at which the utilization of the data begins and the theoretical instant at which the utilization of the data is to be triggered.

2. (previously presented) The device as claimed in claim 1, wherein the minimum duration (d) is an increasing function of the size of an area of the memory empty of data.

3. (previously presented) The device as claimed in claim 2, wherein the minimum duration (d) is proportional, at the instant $t+\Delta t$, to the quantity $Xp(t+\Delta t)$ such that:

$Xp(t+\Delta t) = K_P \times EM(t+\Delta t)$ where

K_P is a positive real number and $EM(t+\Delta t)$ a data item representing the size of the area of the memory empty of data at the instant $t+\Delta t$, Δt representing the duration separating the detection of two successive data sets.

4. (previously presented) The device as claimed in claim 3, wherein the minimum duration (d) is proportional, at the instant $t+\Delta t$, to the quantity $Xp,i(t+\Delta t)$ such that:

$Xp,i(t+\Delta t) = Xp(t+\Delta t) + Ki \times I(t+\Delta t)$, where

Ki is a positive real number, and

$I(t+\Delta t) = I(t) - R$ with $I(t+\Delta t)$ such that $-I1 < I(t+\Delta t) < I2$ and

$R = T_A - T_R$, T_A being the instant at which the utilization of the data begins and T_R the theoretical instant at which the utilization of the data is to be triggered.

5. (previously presented) The device as claimed in claim 4, wherein the minimum duration is proportional, at the instant $t+\Delta t$, to the quantity $Xp,i,d(t+\Delta t)$ such that:

$Xp,i,d(t+\Delta t) = Xp,i(t+\Delta t) - Kd \times (EM(t+\Delta)-EM(t))/\Delta t)$, where

Kd is a positive real number.

6. (previously presented) The device as claimed in claim 1, wherein the area of the memory for storing the processed data intended to be utilized is divided into various memory spaces each containing a data set and wherein said device comprises a counter for tagging the various memory spaces as they are being filled so that the utilized data are those contained in the memory space tagged first.

7. (previously presented) The device as claimed in claim 1, wherein the detected data set represents a subtitle consisting of coded data detected in a flow of data conveyed according to the MPEG 2 System transport standard and wherein the processing circuit is a circuit for decoding the coded data, the utilization of the data being the displaying of the decoded data on screen.

8. (previously presented) A decoder operating as claimed in the MPEG 2 video standard, wherein said decoder comprises the device as claimed in claim 7.

9. (previously presented) A method for time-managing the utilization of data detected in a data flow and constituting at least one data set, the process comprising a step of storing the detected data, a step of processing the stored data, a step of storing the data emanating from the processing step and a step of utilizing the stored data emanating from the processing step, the utilization of the processed data having to be triggered at a given theoretical instant (T_R), wherein said method it comprises a step of calculating a minimum duration (d) of utilization of the data, which is proportional to the amount of data (L) contained in the data set.

10. (previously presented) The method as claimed in claim 9, wherein the minimum duration (d) is an increasing function of the size of a data storage area empty of data.

11. (previously presented) The method as claimed in claim 10, wherein the increasing function is proportional to the quantity $Xp(t+\Delta t)$ such that:

$Xp(t+\Delta t) = K_P \times EM(t+\Delta t)$, where

K_P is a positive real number and $EM(t+\Delta t)$ a data item representing the size of the data storage area empty of data at the instant $t+\Delta t$, Δt being a duration representing the detection of two successive subtitles.

12. (previously presented) The method as claimed in claim 11, wherein the increasing function is proportional, to the quantity $Xp,i(t+\Delta t)$ such that:

$Xp,i(t+\Delta t) = Xp(t+\Delta t) + Ki \times I(t+\Delta t)$, where

Ki is a positive real number, and

$I(t+\Delta t) = I(t) - R$ with $I(t+\Delta t)$ such that $-I1 < I(t+\Delta t) < I2$, and

$R = T_A - T_R$, T_A being the instant at which the utilization of the data begins

and T_R the theoretical instant at which the utilization of the data is to be triggered.

13. (previously presented) The method as claimed in claim 12, wherein the increasing function is proportional to the quantity $Xp,i,d(t+\Delta t)$ such that:

$Xp,i,d(t+\Delta t) = Xp,i(t+\Delta t) - Kd \times (EM(t+\Delta t)-EM(t))/\Delta t)$, where

Kd is a positive real number.

14. (previously presented) The method as claimed in claim 9, wherein said method comprises a step of counting making it possible for the utilized data to be the data emanating from the processing step which has been stored for the longest time.

15. (previously presented) The method as claimed in claim 9, wherein the set of data detected in the data flow represents a subtitle consisting of coded

data in a data flow conveyed according to the MPEG 2 System transport standard, wherein the processing of the data is the decoding of the coded data and wherein the utilization of the data is the displaying of the decoded data on screen.

16. (previously presented) The method as claimed in claim 15, wherein the minimum duration (d) of display of the decoded data is proportional to a parameter (m) dependent on weighting means related to the language in which the subtitle is to be displayed.

17. (previously presented) The device of claim 1, wherein the given theoretical instant is a same value as specified in a presentation time stamp.

18. (previously presented) The device of claim 1, wherein the given theoretical instant is a time reference whose value is proportional to a duration it takes to decode said processed data.

19. (previously presented) A method for displaying data representing a subtitle received in an MPEG compatible transport stream comprising the steps of:

detecting said data from a data flow transported as part of the MPEG compatible transport stream;

decoding said data into a subtitle, wherein said subtitle corresponds to a sequence of MPEG video images; and

displaying said subtitle information as to be superimposed over said sequence of MPEG video images in accordance with a presentation time stamp (PTS) which determines when to display said subtitle information and displaying said subtitle information for a duration in proportion to a value corresponding to the length of the subtitle.

20. (previously presented) The method of claim 19, wherein said duration of display is calculated in view of the length of said subtitle information and a size of a memory area used to store said subtitle information where the duration increases when the size of said memory area empty of data increases and decreases when the size of the memory area empty of data decreases.